BEST AVAILABLE JUPY

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims (deleted text being struck through and added text being underlined):

- 1 1. (Original) A me hod for the automatic configuration of dynamic database search forms comprising:
- obtaining a database listing containing the uniform resource locators

  (URLs) for each one of: plurality of databases to be configured;
- 5 accessing each one of said plurality of databases;
- 6 capturing a web page from the database associated with said URL;
- 7 locating data entry windows in said captured web page;
- selecting a most probable data entry window of data entry windows for passing queries to said database;
- searching candidat: responses for a next link indicating a next page for additional results from said database in response to a query; and
- writing an engine lile describing the form layout and requirements based upon said candida e responses and said next link.
- 2. (Original) The r ethod of claim 1, wherein the step of accessing each one of said plurality of databases further comprises accessing a network and following a URL to a database on said network to be configured for automatic completion of search forms.
- 3. (Original) The n ethod of claim 1, wherein the step of locating data entry windows in said captured web page further comprises:
- saving information captured from the web page as a source version of the web page;
- filtering said source version into additional listings of URLs and text portions;
- 7 examining said tex portions for occurrences of a form label;

8 collecting each form tagged with the form label;

scoring each one o said forms to develop a numerical representation

10 of a likelihood that any one form is a query input form;

selecting one of sa d forms based on said form having a higher

12 numerical representation than any other of said forms;

storing an action s ring associated with said form, said action string

comprising a URL havin; at least a domain portion, a program portion, and

15 a query portion;

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storing a get-post ndicator associated with said database.

4. (Previously presented) A method for the automatic configuration of dynamic database search forms comprising:

obtaining a database listing containing the uniform resource locators (URLs) for each one of a plurality of databases to be configured;

accessing each one of said plurality of databases;

6 capturing a web page from the database associated with said URL;

7 locating data entry windows in said captured web page;

selecting a most probable data entry window of data entry windows for

9 passing queries to said database;

searching candidat: responses for a next link indicating a next page

for additional results from said database in response to a query; and

writing an engine tile describing the form layout and requirements

based upon said candida e responses and said next link;

wherein the step of locating data entry windows in said captured web

15 page further comprises:

saving information captured from the web page as a source

version of the web page;

filtering said source version into additional listings of URLs and

19 text portions;

20 examining sail text portions for occurrences of a form label;

21 collecting each form tagged with the form label;

scoring each one of said forms to develop a numerical

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23 representation of a likelihood that any one form is a query input form; 24 selecting one of said forms based on said form having a higher 25 numerical represen ation than any other of said forms; 26 storing an action string associated with said form, said action string comprising a URL having at least a domain portion, a program 27 portion, and a quer portion; 28 29 storing a get-post indicator associated with said database; 30 wherein the step o scoring each one of said forms further comprises: 31 locating an action string associated with said data entry window; 32 obtaining a listing of bad action string; comparing sa d action string with said listing of bad action 33 34 strings and determining if a portion of said action string matches any 35 bad action strings of said listing of bad action strings, setting said 36 numerical representation to zero and terminating said step of scoring if 37 a portion of said action string matches any of said bad action strings 38 within a predefined window determined by a binding factor; 39 setting a nam: matching metric; 40 setting an uncesirable link text metric; 41 setting an uncesirable value metric; 42 setting a desi able link text metric; 43 setting a null text metric; 44 computing a said numerical representation.

- 5. (Original) The rethod of claim 4, wherein the step of setting said numerical representation further comprises using value of 0 for said binding factor associated with said bad action string metric.
- 6. (Previously presented) The method of claim 4, wherein the step of setting a name matching metric further comprises:
- locating said data intry URL associated with the data entry window;
  locating a page UFL associated with the web page;

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- comparing a host rame portion of said data entry URL with a host name portion of said page URL;
- setting a name matching metric to a presence predetermined value if said host name portion of said data entry URL matches said host name portion of said page UR.;
- setting a name matching metric to an absence predetermined value if said host name portion of said data entry URL does not match said host name portion of said page URL.
- 7. (Original) The riethod of claim 6, wherein said steps of setting a name matching metric further comprise:
- using a value of 6 for said presence predetermined value associated with said name matching metric;
- 5 using a value of 0 for said absence predetermined value associated 6 with said name matching metric.
  - 8. (Original) The riethod of claim 4, wherein the step of setting an undesirable link text me ric further comprises:
    - locating said action string associated with said data entry window; obtaining a listing of undesirable link texts;
  - comparing said action string with said listing of undesirable link text and determining if a por ion of said action string matches any undesirable link texts of said listing of undesirable link texts, setting said numerical representation to zero at d terminating said step of scoring if a portion of said action string match is any of said undesirable link texts within a predefined window determined by a binding factor.
- 9. (Original) The riethod of claim 8, wherein said steps of setting an undesirable link metric urther comprises using a value of 1 for said binding factor associated with si id undesirable link text.
  - 10. (Original) The method of claim 5, wherein the step of setting an

undesirable value metric further comprises: 2

locating said action string associated with said data entry window; 3

obtaining a listing of undesirable values; 4

comparing said action string with said listing of undesirable value and determining if a portion of said action string matches any undesirable values of said listing of undesi able values, setting an undesirable value metric to a presence predetermine I value if a portion of said action string matches any of said undesirable 'alues within a predefined window determined by a binding factor, and setting an undesirable value metric to an absence predetermined value if a portion of said action string does not match an undesirable value withir a predefined window determined by a binding

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13 factor.

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11. (Original) The method of claim 10, further comprising:

using a value of 0 for said presence predetermined value associated

with said undesirable value metric; 3

using a value of 4 for said absence predetermined value associated 4 5 with said undesirable value metric;

using a value of 0 for said binding factor associated with said undesirable value metric.

12. (Original) The method of claim 5, wherein the step of setting a desirable link text metric further comprises:

locating said action string associated with said data entry window;

obtaining a listing of desirable link texts; 4

comparing said ac ion string with said listing of desirable link text 5 and determining if a postion of said action string matches any desirable link 6

texts of said listing of cesirable link texts, setting an desirable link text 7

metric to a presence predetermined value if a portion of said action string 8

matches any of said des rable link texts within a predefined window 9

determined by a binding factor, and setting an desirable link text metric to 10

an absence predetermined value if a portion of said action string does not 11

- 12 match an desirable link ext within a predefined window determined by a
- 13 binding factor.
- 1 13. (Original) The method of claim 12, further comprising:
- 2 using a value of 4 for said presence predetermined value associated
- 3 with said desirable text netric;
- 4 using a value of 0 for said absence predetermined value associated
- 5 with said desirable text netric;
- 6 using a value of 2 for said binding factor associated with said
- 7 desirable text metric.
- 1 14. (Original) The method of claim 4, wherein the step of setting a
- 2 null text metric further :omprises:
- locating said action string associated with said data entry window;
- 4 checking said action string for an absence of associated text;
- setting a null text metric to a presence predetermined value if no text
- 6 is associated with said form.
- 1 15. (Original) The method of claim 14, wherein said step of setting a
- 2 null text metric further comprises using a value of 2 for said null text
- 3 metric.
- 1 16. (Original) The method of claim 4, wherein said step of calculating
- 2 said numerical representation further comprises adjusting said numerical
- 3 representation by adding an integer value determined by the number of edit
- 4 boxes on said web page.
- 1 17. (Original) The method of claim 3, wherein the step of scoring each
- 2 one of said forms further comprises:
- locating an action string associated with said data entry window;
- 4 obtaining a listing of bad action strings;
- 5 comparing said ac ion string with said listing of bad action strings and
- 6 determining if a portion of said action string matches any bad action string

- 7 of said listing of bad ac ion strings, setting said numerical representation to
- 8 zero and terminating sail step of scoring if said bad action string matches a
- 9 portion of said action string within a predefined window determined by a
- 10 binding factor;

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wherein the step o'setting said numerical representation further
comprises using value o'0 for said binding factor associated with said bad
action string metric;

locating a page UFL associated with the web page;

comparing a host rame portion of said data entry URL with a host

16 name portion of said pase URL;

setting a name matching metric to a presence predetermined value if.

18 said host name portion of said data entry URL matches said host name

19 portion of said page UR 2;

setting a name marching metric to an absence predetermined value if said host name portion of said data entry URL does not match said host name portion of said pare URL;

said steps of setting a name matching metric further comprises:

using a value of 6 for said presence value associated with said name matching metric;

using a value of 0 for said absence value associated with said name matching metric;

obtaining a listing of undesirable link texts;

comparing said ac ion string with said listing of undesirable link text and determining if a portion of said action string matches any undesirable link texts of said listing of undesirable link texts, setting said numerical representation to zero and terminating said step of scoring if a portion of said action string matches any of said undesirable link texts within a predefined window determined by a binding factor;

using a value of 1 for said binding factor associated with said undesirable link text;

obtaining a listing of undesirable values;

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comparing said action string with said listing of undesirable value and determining if a portion of said action string matches any undesirable values of said listing of undesirable values, setting an undesirable value metric to a presence predetermine I value if a portion of said action string matches any of said undesirable 'alues within a predefined window determined by a binding factor, and setting an undesirable value metric to an absence predetermined value if a portion of said action string does not match an undesirable value within a predefined window determined by a binding factor;

using a value of 0 for said presence predetermined value associated with said undesirable value metric;

using a value of 4 for said absence predetermined value associated with said undesirable value metric;

using a value of 0 for said binding factor associated with said undesirable value metric;

obtaining a listing of desirable link texts;

comparing said ac ion string with said listing of desirable link text and determining if a postion of said action string matches any desirable link texts of said listing of cesirable link texts, setting an desirable link text metric to a presence predetermined value if a portion of said action string matches any of said des rable link texts within a predefined window determined by a binding factor, and setting an desirable link text metric to an absence predetermined value if a portion of said action string does not match an desirable link text within a predefined window determined by a binding factor;

using a value of 4 for said presence predetermined value associated with said desirable text metric;

using a value of 0 for said absence predetermined value associated with said desirable text metric;

67 using a value of 2 for said binding factor associated with said desirable text metric;

69 checking said action string for an absence of associated text;

70 setting a null text netric to a presence predetermined value if no text

is associated with said form; 71

using a value of 2 for said null text metric;

computing a numerical representation of the likelihood that said data 73

entry is a correct data entry window for passing queries to said database;

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76 adjusting said numerical representation by adding an integer value determined by the numb or of edit boxes on said web page. 77

18. (Previously presented) The method of claim 1, further comprising: 1

determining a location of each one of a plurality of results locations

on a responsive web page where results from a query are posted;

determining a location of each one of a plurality of non-results items 4

on a responsive page are posted.

- 19. (Previously presented) A method for the automatic configuration 1 2 of dynamic database sea ch forms comprising:
- obtaining a database listing containing the uniform resource locators 3 (URLs) for each one of . plurality of databases to be configured;

accessing each one of said plurality of databases; 5

capturing a web page from the database associated with said URL; 6

7 locating data entry windows in said captured web page;

selecting a most p obable data entry window of data entry windows for 8

9 passing queries to said (atabase;

searching candidate responses for a next link indicating a next page 10

for additional results from said database in response to a query; and 11

12 writing an engine 'ile describing the form layout and requirements

based upon said candidate responses and said next link; 13

14 determining a location of each one of a plurality of results locations

15 on a responsive web page where results from a query are posted;

determining a location of each one of a plurality of non-results items 16

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17 on a responsive page arε posted;

18 selecting a plurali y of validation queries;

submitting a first one of said plurality of validation queries to said database using said action string;

capturing a first responsive web page returned in response to said first one of said plurality of 'alidation queries;

resubmitting said irst one of said plurality of validation queries to said database using said action string;

capturing a second responsive web page returned in response to said second submission of said first one of said plurality of validation queries;

comparing said first responsive web page with said second responsive web page, any differences between said first and second responsive web page are extraneous responses and are ignored, storing any duplicates between said first and second responsive web pages as candidate responses to said validation query

32 storing said candi: ate responses;

submitting a secord one of said plurality of validation queries to said database using said action string;

capturing a responsive web page returned in response to said second validation query;

repeating submiss on of additional validation queries and capture of additional responsive w:b pages until all validation queries have been submitted:

comparing said first responsive web page to each of said additional responsive web pages, i moring any duplicates between said first responsive and additional responsive web pages as extraneous responses, storing any differences between sail first responsive and said additional responsive web pages as candidate responses to said validation query;

comparing each ore of said responsive web pages to all other said responsive web pages, ignoring any duplicates between said responsive web pages as extraneous ressonses, storing any differences between said

- 48 responsive web pages as candidate responses to said validation query; and
  49 searching candidate responses for a next link indicating a next page
- 50 for additional results from said database in response to said query.
- 20. (Original) The method of claim 19, wherein said step of comparing said first responsive we page with said second responsive web page further comprises:
- comparing each URL in said first responsive web page with each URL in said second responsive web page;
- capturing a location associated with every URL common between said first responsive web page and said second responsive web page as a potential location for results from a query;
- general capturing a location associated with every URL distinct between said first responsive web page and said second responsive web page as a potential location not associated with results from a query;
- 12 comparing each lasel associated with each URL in said first
  13 responsive web page with each label associated with each URL in said
  14 second responsive web rage;
- capturing a location, associated with every label associated with every

  URL, which is common between said first responsive web page and said

  second responsive web; age as a potential location for results from a query;
- capturing a location, associated with every label associated with every
  URL, which is distinct letween said first responsive web page and said
  second responsive web page as a potential location not associated with
  results from a query.
- 21. (Original) The method of claim 19, wherein said step of comparing said first responsive we) page with said additional responsive web page further comprises:
- comparing each U tL in said first responsive web page with each URL in said additional responsive web page;
- 6 capturing a location associated with every URL common between said

- 7 first responsive web page and said additional responsive web page as a
- 8 potential location for results from a query;
- 9 capturing a location associated with every URL distinct between said
- 10 first responsive web page and said additional responsive web page as a
- 11 potential location not associated with results from a query;
- comparing each lavel associated with each URL in said first
- 13 responsive web page with each label associated with each URL in said
- 14 additional responsive w b page;
- capturing a location, associated with every label associated with every
- 16 URL, which is common between said first responsive web page and said
- 17 additional responsive w b page as a potential location for results from a
- 18 query;
- capturing a location, associated with every label associated with every
- 20 URL, which is distinct between said first responsive web page and said
- 21 additional responsive web page as a potential location not associated with
- 22 results from a query.
- 1 22. (Original) The method of claim 19, wherein said step of comparing
- 2 each one of said responsive web pages with all other said responsive web
- 3 pages further comprises
- 4 comparing each U L in each one of said responsive web pages with
- 5 each URL in all other said responsive web pages;
- 6 capturing a location associated with every URL common between each
- 7 one of said responsive veb pages and all other said responsive web pages as
- 8 a potential location for esults from a query;
- 9 capturing a location associated with every URL distinct between each
- 10 one of said responsive web pages and all other said responsive web pages as
- 11 a potential location not associated with results from a query;
- comparing each label associated with each URL in each one of said
- 13 responsive web pages vith each label associated with each URL in all other
- 14 said responsive web pages;

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capturing a location, associated with every label associated with every 15 URL, which is common between each one of said responsive web pages and 16 all other said responsive web pages as a potential location for results from a 17 18 query;

capturing a location, associated with every label associated with every 19 URL, which is distinct letween each one of said responsive web pages and 20 all other said responsive web pages as a potential location not associated 21 with results from a quer/. 22

23. (Original) The method of claim 19, further comprising:

comparing each ULL in said first responsive web page with each URL 2 3 in said second responsive web page;

capturing a location associated with every URL common between said 4 5 first responsive web page and said second responsive web page as a 6 potential location for results from a query;

capturing a location associated with every URL distinct between said first responsive web page and said second responsive web page as a potential location not associated with results from a query;

comparing each lasel associated with each URL in said first responsive web page w th each label associated with each URL in said second responsive web ; age;

capturing a location, associated with every label associated with every URL, which is common between said first responsive web page and said second responsive web | age as a potential location for results from a query;

capturing a location, associated with every label associated with every 16 URL, which is distinct tetween said first responsive web page and said second responsive web j age as a potential location not associated with results from a query;

20 comparing each U L in said first responsive web page with each URL 21 in said additional responsive web page;

capturing a locatien associated with every URL common between said

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first responsive web page and said additional responsive web page as a potential location for results from a query;

capturing a location associated with every URL distinct between said first responsive web page and said additional responsive web page as a potential location not associated with results from a query;

comparing each latel associated with each URL in said first responsive web page with each label associated with each URL in said additional responsive w b page;

capturing a location, associated with every label associated with every URL, which is common between said first responsive web page and said additional responsive web page as a potential location for results from a query;

capturing a location, associated with every label associated with every URL, which is distinct letween said first responsive web page and said additional responsive web page as a potential location not associated with results from a query;

comparing each U iL in each one of said responsive web pages with each URL in all other si id responsive web pages;

capturing a location associated with every URL common between each one of said responsive veb pages and all other said responsive web pages as a potential location for results from a query;

capturing a location associated with every URL distinct between each one of said responsive web pages and all other said responsive web pages as a potential location not associated with results from a query;

comparing each label associated with each URL in each one of said responsive web pages vith each label associated with each URL in all other said responsive web pages;

URL, which is common between each one of said responsive web pages and all other said responsive web pages as a potential location for results from a query;

- capturing a location, associated with every label associated with every
  URL, which is distinct between each one of said responsive web pages and
  all other said responsive web pages as a potential location not associated
  with results from a quer.
- 24. (Original) The method of claim 19, wherein said step of selecting a plurality of validation queries further comprises:
- selecting the term "home" as a first one of said plurality of validation queries;
- selecting the term "copyright" as a second one of said plurality of validation queries;
- 7 selecting the term "web" as a third one of said plurality of validation
  8 queries.
- 25. (Original) The method of claim 19, wherein said step of selecting a plurality of validation queries further comprises:
- selecting the term "home" as a first one of said plurality of validation queries;
- selecting the term "energy" as a second one of said plurality of validation queries;
- 7 selecting the term "electricity" as a third one of said plurality of 8 validation queries.
- 26. (Original) The method of claim 19, wherein said step of searching candidate responses for a next link further comprises:
- obtaining a next term listing providing a plurality of labels commonly
  associated with data entry windows used for accessing additional results
  from a database associated with a user's query;
- comparing each lasel associated with each URL in said first responsive web page with each one of said plurality of labels in order provided in said next term listing;
- 9 selecting a data ertry window as a next link if said label associated

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- with said data entry win low matches one of said plurality of labels provided
- by said next link listing within a predetermined window defined by a 11
- 12 binding factor.

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27. (Original) The method of claim 26, wherein said step of selecting 1 a data entry window further comprises: 2

determining if a match has been made between said label associated 3 with said data entry win low and one of said plurality of labels provided by 4 said next link listing; 5

comparing each la el associated with each URL in a first one of said additional responsive w b pages associated with a second one of said validation queries with ach one of said plurality of labels in order provided in said next term listing in no match has been made;

selecting a data entry window as a next link if said label associated with said data entry win low matches one of said plurality of labels provided by said next link listing within a predetermined window defined by a binding factor if no price match has been made.

- 28. (Original) The method of claim 26, wherein said step of selecting 1 a data entry window fur her comprises using a value of approximately 1.5 2 3 for said binding factor.
  - 29. (Original) The method of claim 3, wherein the step of scoring each one of said forms further comprises:

locating an action string associated with said data entry window;

obtaining a listing of bad action string;

comparing said ac ion string with said listing of bad action strings and determining if a bad act on string matches a portion of said action string; setting said numerical r:presentation to zero and terminating said step of scoring if said bad action string matches a portion of said action string within a predefined win low determined by a binding factor;

using a value of 0 for said binding factor associated with said bad

11 action string metric;

locating said data entry URL associated with the data entry window;

locating a page UF L associated with the web page;

14 comparing a host rame portion of said data entry URL with a host

15 name portion of said page URL;

setting a name matching metric to a presence predetermined value if said host name portion of said data entry URL matches said host name portion of said page UR 2;

setting a name matching metric to an absence predetermined value if said host name portion of said data entry URL does not match said host name portion of said page URL;

using a value of 0 for said absence predetermined value associated with said name matchin; metric;

obtaining a listing of undesirable link texts;

comparing said ac ion string with said listing of undesirable link text and determining if a portion of said action string matches any undesirable link texts of said listing of undesirable link texts, setting said numerical representation to zero and terminating said step of scoring if a portion of said action string matches any of said undesirable link texts within a predefined window determined by a binding factor;

using a value of 1 for said binding factor associated with said undesirable link text;

obtaining a listing of undesirable values;

comparing said ac ion string with said listing of undesirable value and determining if a portion of said action string matches any undesirable values of said listing of undesirable values, setting an undesirable value metric to a presence predetermined value if a portion of said action string matches any of said undesirable values within a predefined window determined by a binding factor, and setting an undesirable value metric to an absence predetermined value if: portion of said action string does not match an undesirable value within a predefined window determined by a binding

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using a value of 0 for said presence value associated with said undesirable value metric;

using a value of 0 for said binding factor associated with said undesirable value metric;

obtaining a listing of desirable link texts;

comparing said ac ion string with said listing of desirable link text and determining if a portion of said action string matches any desirable link texts of said listing of cesirable link texts, setting an desirable link text metric to a presence predetermined value if a portion of said action string matches any of said des rable link texts within a predefined window determined by a binding factor, and setting an desirable link text metric to an absence predetermined value if a portion of said action string does not match an desirable link text within a predefined window determined by a binding factor;

using a value of 0 for said absence predetermined value associated with said desirable text metric;

using a value of 2 for said binding factor associated with said desirable text metric;

checking said action string for an absence of associated text; setting a null text metric to a presence predetermined value if no text

using values for s id presence predetermined value associated with said name matching metric, said absence predetermined value associated with said undesirable v: lue metric, said presence predetermined value associated with said de: irable text metric, and said null text metric such that the relative weight ng of each of said metrics is approximately 3:2:2:1 respectively; and

70 computing a said sumerical representation.

is associated with said orm;

30. (Currently Arrended) A system for the automatic configuration of

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2 dynamic database search forms comprising:

a computer system having a storage means for facilitating the retention and recall of domanic database content, said computer system having a communication: means for performing bi-directional communications between said computer system and a network;

a query input mears for receiving a plurality of queries from a user and transferring the plurality of queries to a plurality of databases;

an action string module interfaced to said computer system and configured to automatic. Hy determine a format associated with an entry page for a database from said entry page, said action string module being configured to automatic. Hy determine an appropriate data entry window on said entry page for use in passing a query to said database;

a results module is terfaced to said computer system and said action string module, said results module locating areas on a responsive page returned by said database in response to said query where results are placed;

a next link module interface to each one of said computer system, action string module, and results module, said next link module locating a link associated with additional results provided by said database in response to said query;

an engine file module interfaced to said computer system and every ether-module said modules for storing results produced by each module such that a general format query is translatable into a database specific format allowing a common que y to be submitted to multiple databases each requiring different formats.

- 31. (Original) The system of claim 30, further comprising a data comparison portion pro iding user specific information to each of said modules for facilitating analysis of said databases.
- 32. (Previously presented) A system for the automatic configuration of dynamic database searc i forms comprising:
- a computer systen having a storage means for facilitating the

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- 4 retention and recall of cynamic database content, said computer system
- 5 having a communication's means for performing bi-directional
- 6 communications betwee said computer system and a network;
- a query input mea; s for receiving a plurality of queries from a user
- 8 and transferring the plu ality of queries to a plurality of databases;
- an action string module interfaced to said computer system for
- determining a format as ociated with an entry page for a database, said action string module be ng for determining an appropriate data entry
- 12 window for use in passing a query to said database;
- a results module i sterfaced to said computer system and said action
- 14 string module, said results module locating areas on a responsive page
- 15 returned by said database in response to said query where results are placed;
- a next link module interface to each one of said computer system,
- 17 action string module, and results module, said next link module locating a
- 18 link associated with additional results provided by said database in response
- 19 to said query;
- an engine file mocule interfaced to said computer system and every
- 21 other module for storing results produced by each module such that a
- 22 general format query is translatable into a database specific format allowing
- 23 a common query to be submitted to multiple databases each requiring
- 24 different formats;
- 25 a data comparison postion providing user specific information to each of
- said modules for facilitating analysis of said databases;
- wherein said data comparison portion further comprises:
- 28 a database li ting providing a URL for each of said databases to
- 29 be analyzed;
- 30 a bad action string listing providing URLs for known databases
- which are not to be included in the analysis of said databases;
- a desirable text link listing providing a plurality of desirable
- . 33 terms for use in analysis of said databases, a presence of any one of

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said plurality of desirable terms increasing a score associated with a data entry window on one of said responsive pages;

an undesirable text link listing providing a plurality of undesirable terms for use in analysis of said databases, a presence of any one of said plurality of undesirable terms setting a score associated with a data entry window on one of said responsive pages to 0 and ending analysis of said data entry window; and

an undesirable value listing providing a plurality of undesirable values for use in a alysis of said databases, a presence of any one of said plurality of undesirable values decreases a score associated with a data entry window on one of said responsive pages.

33. (Original) The system of claim 31, wherein said data comparison portion further comprises:

a next link listing providing said next link module with a plurality of candidate terms for faci itating selection of a URL associated with a link to additional responses previded by said database in response to said query.

34. (Original) A s'stem for the automatic configuration of dynamic database search forms comprising:

a computer system having a storage means for facilitating the retention and recall of cynamic database content, said computer system having a communications means for performing bi-directional communications between said computer system and a network;

a query input mea is for receiving a plurality of queries from a user and transferring the plurality of queries to a plurality of databases;

an action string module interfaced to said computer system for determining a format associated with an entry page for a database, said action string module be ng for determining an appropriate data entry window for use in passing a query to said database;

a results module interfaced to said computer system and said action string module, said results module locating areas on a responsive page

15 returned by said databas: in response to said query where results are placed;

a next link module interface to each one of said computer system,

17 action string module, and results module, said next link module locating a

link associated with add tional results provided by said database in response

19 to said query;

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an engine file module interfaced to said computer system and every other module for storing results produced by each module such that a general format query is ranslatable into a database specific format allowing a common query to be s: bmitted to multiple databases each requiring different formats;

a database listing providing a URL for each of said databases to be analyzed;

a bad action string listing providing URLs for known databases which are not to be included in the analysis of said databases;

a desirable text link listing providing a plurality of desirable terms for use in analysis of said databases, a presence of any one of said plurality of desirable terms increases a score associated with a data entry window on one of said responsive rages;

an undesirable tex: link listing providing a plurality of undesirable terms for use in analysi of said databases, a presence of any one of said plurality of undesirable terms sets a score associated with a data entry window on one of said responsive pages to 0 and ending analysis of said data entry window; and

an undesirable value listing providing a plurality of undesirable values for use in analysis of said databases, a presence of any one of said plurality of undesirable values decreases a score associated with a data entry window on one of said responsible pages;

a next link listing providing said next link module with a plurality of candidate terms for facilitating selection of a URL associated with a link to additional responses provided by said database in response to said query.

- 35. (Previously presented) A method for automatic configuration of dynamic search forms for a database, said method comprising:
- 3 accessing a web page from a web site providing access to a database;
- 4 capturing said web page;
- locating at least one data entry window in said captured web page;
- 6 determining a mos probable data entry window of said at least one
- 7 data entry window for passing queries to said database;
- 8 storing an identification of said most probable data entry window in
- 9 association with an iden ification of said database for use in submitting
- 10 queries to said database
- 1 36. (Previously presented) The method of claim 35, wherein said step 2 of determining said mos probable data entry window includes:
- 3 submitting at least one query to said database using said most
- 4 probable data entry win ow; and
- 5 evaluating responses from said web site to said at least one query for
- 6 determining a likelihoot that said most probable data entry window a proper
- 7 window for searching said database.
- 1 37. (Previously p esented) The method of claim 35, further
- 2 comprising:
- 3 searching candida e responses from said web site for a link indicating
- 4 a next page for additional results from said database in response to a query;
- 5 and
- 6 storing an identification of said link the next page for additional
- 7 results.
- 1 38. (Previously presented) The method of claim 35, wherein said web
- 2 page includes a pluralit / of data entry windows, and wherein said step of
- 3 determining said most probable data entry window includes selecting a most
- 4 probable data entry win low, from said plurality of said data entry windows,
- 5 for passing queries to said database.

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- 39. (Previously presented) The method of claim 35, wherein the step of capturing said web page further comprises:
- saving information captured from the web page as a source version of the web page.
- 1 40. (Previously presented) The method of claim 39, wherein the step 2 of locating said at least one data entry window further comprises:
- filtering said sour e version into listings of links and text portions;

  examining said text portions for occurrences of a form label; and

  collecting each form tagged with the form label.
  - 41. (Previously presented) The method of claim 40, wherein the step of determining said mos probable data entry window further comprises:
  - scoring each one of said forms to develop a numerical representation of a likelihood that any one form is a query input form; and selecting one of said forms based on said form having a higher
- selecting one of said forms based on said form having a higher numerical representatio: than any other of said forms.
- 1 42. (Previously piesented) The method of claim 41, wherein the step 2 of storing an identificat on of said most probable data entry window further 3 comprises:
  - storing an action string associated with said form, said action string comprising a representa ion of a uniform resource locator (URL) link having at least a domain portio,, a program portion, and a query portion.
  - 43. (New) The me hod of claim 1, wherein the step of capturing the web page includes stori .g substantially all portions of the web page.
  - 44. (New) The me hod of claim 1, wherein the step of capturing the web page includes stori ig text portions of the web page associated with any said data entry windows of the web page.

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